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Search for Periodic Rate Variations in XENON100 and Comparison with DAMA/LIBRA Annual Modulation[1] PATRICK DE PERIO, Columbia Univ, XENON COLLABORATION — The stability of the XENON100 detector and electronic recoil event rate in the (2-6) keV energy range was studied for 1 live-year of dark matter search data taken between February, 2011 and January, 2014. An un-binned profile likelihood analysis is used to identify potential periodic signatures in the electronic recoil data. The results of these studies and a comparison with the DAMA/LIBRA annual modulation will be presented.

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